

Please amend the claims as follows:

**Listing of Claims:**

1. (Cancelled).

2. (Currently amended): A biological process for producing carotenoids including astaxanthin, the process comprising cultivating a microorganism which is capable of producing carotenoids including astaxanthin and belonging to the genus *Xanthophyllomyces (Phaffia)* in the presence of an inhibitor for of biosynthesis of sterols from farnesyl pyrophosphate, a substrate for producing carotenoids including astaxanthin, in an aqueous nutrient medium under aerobic conditions, and isolating the resulting carotenoids including astaxanthin, from the cells of said microorganism or from the cultured broth, wherein the astaxanthin content of the isolated carotenoids is greater than that which results from cultivating in the absence of an inhibitor of biosynthesis of sterols from farnesyl pyrophosphate.

3. (Original): The process according to claim 2, wherein the microorganism is *Xanthophyllomyces dendrorhous (Phaffia rhodozyma)* ATCC96594.

4 - 12. (Cancelled.)

13. (Currently amended): The process according to claim 2, wherein the inhibitor for of biosynthesis of sterols from farnesyl pyrophosphate is ~~selected from the group consisting of a squalene synthase inhibitors~~ inhibitor.

14. (Withdrawn): The process according to claim 13, wherein the squalene synthase inhibitor is selected from the group consisting of ammonium ion based squalene synthase inhibitors.

15. (Currently amended): The process according to claim 44 13, wherein the ~~ammonium ion-based~~ squalene synthase inhibitor is ~~selected from the group consisting of a~~ phenoxypropylamine-type squalene synthase ~~inhibitors~~ inhibitor.

16. (Previously presented): The process according to claim 15, wherein the phenoxypropylamine-type squalene synthase inhibitor is selected from the group consisting of [3-(3-allyl-biphenyl-4-yloxy)-propyl]-isopropyl-amine, N-isopropyl-3-(4-acetamido-2-allylphenoxy) propylamine, N-methyl-N-isopropyl-3-(4-acetamide-2-allylphenoxy) propylamine, N-cyclopentyl-3-(4-acetamido-2-allylphenoxy) propylamine, N-cyclobutyl-3-(4-acetamide-2-allylphenoxy) propylamine, N-isopropyl-3-(2-allyl-4-butyramidophenoxy) propylamine, N-isopropyl-3-(4-acetamido-2-chlorophenoxy) propylamine, N-isopropyl-3-(4-acetamido-2-propylphenoxy) propylamine, and N-isopropyl-3-(4-acetamido-2-allylphenoxy)-1-methylpropylamine, and biologically acceptable salts thereof.

17. (Previously presented): The process according to claim 16, wherein the phenoxypropylamine-type squalene synthase inhibitor is [3-(3-allyl-biphenyl-4-yloxy)-propyl]-isopropyl-amine, or a biologically acceptable salt thereof, N-isopropyl-3-(4-acetamido-2-allylphenoxy) propylamine or N-methyl-N-isopropyl-3-(4-acetamide-2-allylphenoxy) propylamine.

18. (Currently amended): The process according to claim 2, wherein ~~the a~~ concentration of the ~~said~~ inhibitor is within the range that gives less than 50 % reduction of the cell growth under carotenoids producing conditions.

19. (Currently amended): The process according to claim 18, wherein the concentration of the said inhibitor is within the range that gives less than 30 % reduction of the cell growth under carotenoids producing conditions.

20. (Previously presented): The process according to claim 2, wherein the cultivation is carried out at a pH in the range from 4 to 8 and at a temperature in the range from 15 to 26 °C, for 24 to 500 hours.

21. (Previously presented): The process according to claim 20, wherein the cultivation is carried out at a pH in the range from 5 to 7 and at a temperature in the range from 18 to 22 °C, for 48 to 350 hours.